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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,434	02/10/2000	John S. Lee	510.030US1	3838

7590 12/28/2004

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EXAMINER

CHU, KIM KWOK

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/501,434	LEE ET AL.
Examiner	Art Unit	
Kim-Kwok CHU	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Amendment filed on 11/12/2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 2,4-8,10-12,28,29 and 31-34 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 2,4,8,10,12,28,29 and 31 is/are allowed.
 6) Claim(s) 5,7, 11 and 33 is/are rejected.
 7) Claim(s) 6, 32 and 34 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 April 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

Claim Objections

1. Claims 6, 11 and 32 are objected to because of the following informalities:

- (a) in claim 6, last second line, the term "tot" should be changed to --to--;
- (b) in claim 11, last second line, the term "disc try" should be changed to --disc tray--; and
- (c) in claim 32, line 2, the term "tot" should be changed to --to--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 5, 11 and 33 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Balsom. (U.S. Patent 5,592,596)) in view of Hayashi et al. (U.S. Patent 6,304,525).

Balsom teaches a compact disc processing system very similar to that of the instant invention. For example, Balsom

teaches the following means and steps:

- (a) as in claim 5, a printer 50 for printing indicia on a first compact disc (Column 6, lines 17-20);
- (b) as in claim 5, a recorder 43 for recording information on the first compact disc (column 2, lines 9-12);
- (c) as in claim 5, a transporter carriage 45 for holding the first compact disc and moving the first compact disc to reach the recorder 43 (Fig. 1b);
- (d) as in claim 5, a plurality of disc trays 48 (Fig. 1b); and
- (e) as in claim 5, a selection mechanism 45 coupled to the plurality of disc trays 48 for selectively moving the plurality of disc trays such that the first compact disc can be placed on the selected disc tray for temporary storage (Fig. 1b).

However, Balsom does not teach the following:

- (a) as in claim 5, the transporter carriage for holding the first compact disc and moving the first compact disc between the recorder and the printer;
- (b) as in claim 5, the transporter carriage comprises a single gripping head rotatable about a horizontal axis having first and second locations each for respectively gripping and directly holding the first and second compact disc simultaneously by the single gripping head;

(c) as in claim 5, the first and second compact discs are held in fixed relative positions coextensive along a common axis in different planes while the first and second compact discs are engaged by the gripping head; and

(d) as in claim 33, the gripping head 9 includes a motor 55 for selectively rotating the first compact disc about its axis (Fig. 4).

Hayashi teaches a disc inverting mechanism having above features. For example, Hayashi teaches the following:

(a) a transporter carriage 8 for gripping the first compact disc and moving the first compact disc in both vertical and horizontal direction (Fig. 4);

(b) the transporter carriage 8 comprises a single horizontally rotatable gripping head 9 having first and second locations each for respectively gripping and directly holding the first and second compact disc simultaneously by the single gripping head (Fig. 2);

(c) the first and second compact discs are engaged by the gripping head 9 (Fig. 4);

(d) the first and second compact discs are held in fixed relative positions while the first and second compact discs are engaged by the gripping head 9 (Fig. 4); and

(e) the gripping head 9 includes a motor 55 for selectively rotating the first compact disc about its axis (Fig. 4).

A typical disc labeling system such as Balsom's requires a disc conveying mechanism for transporting a selected disc from one location such as a recording means to another location such as a labeling means. For example, Hayashi uses a vertical and horizontal moveable transporter to convey and rotate a disc from one location to another location. Hence, when there is an advantage of simplifying the transportation mechanism of Balsom's labeling processes, it would have been obvious to one of ordinary skill in the art to use Hayashi's disc transporting and disc rotating means in Balsom's disc labeling processes, because Hayashi's transporter can select a disc from a plurality of disc storage means in one location and then move and flip over the selected disc to the printer similar to the claimed features.

Claim 11 has limitations similar to those treated in the above rejection, and is met by the references as discussed above. Claim 11 however also recites the following limitations:

(a) as in claim 11, the transporter carriage comprises a pickup arm and a gripping head attached to one end of the pickup arm (Fig. 2);

(b) as in claim 11, the gripping head has first and second gripping locations each for respectively gripping the first and second compact discs simultaneously such that the first and second compact discs maintain a fixed axial position while encaged by the gripping head; and

(c) the gripping head is rotatable about a horizontal axis of the pick up arm.

Hayashi teaches a disc gripping and inverting mechanism having above features. For example, Hayashi teaches the following:

(a) as in claim 11, the transporter carriage 8 comprises a pickup arm 21 and a gripping head 9 attached to one end of the pickup arm (Fig. 4; frame 21 is the pickup arm holding the gripping head 9);

(b) as in claim 11, the gripping head 9 has first and second gripping locations each for respectively gripping the first and second compact discs simultaneously such that the first and second compact discs maintain a fixed axial position while encaged by the gripping head (Figs. 4 and 5); and

(c) as in claim 11, the gripping head 9 is rotatable about a horizontal axis of the pick up arm (Fig. 4).

4. Claim 7 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Balsom. (U.S. Patent 5,592,596)) in view of Hayashi et al. (U.S. Patent 6,304,525).

Balsom teaches a compact disc processing system very similar to that of the instant invention. For example, Balsom teaches the following means and steps:

(a) as in claim 7, a printer 50 for printing indicia on a first compact disc (Column 6, lines 17-20);

(b) as in claim 7, a recorder 43 for recording information on the first compact disc (column 2, lines 9-12); and

(c) as in claim 7, a transporter carriage 45 for gripping the first compact disc and moving the first compact disc to reach the recorder 43 (Fig. 1b; gripping means holding tight).

However, Balsom does not teach the following:

(a) as in claim 7, the transporter carriage for holding the first compact disc and moving the first compact disc between the recorder and the printer;

(b) as in claim 7, the transporter carriage comprises a single gripping head rotatable about a horizontal axis having first and second locations each for respectively gripping and directly holding the first and second compact disc simultaneously by the single gripping head;

(c) as in claim 7, the first and second compact discs are held in fixed relative positions coextensive along a common axis in different planes while the first and second compact discs are engaged by the gripping head; and

(d) as in claim 7, the gripping head includes a motor for selectively rotating the first compact disc about its axis.

Hayashi teaches a disc inverting mechanism having above features. For example, Hayashi teaches the following:

(a) a transporter carriage 8 for gripping the first compact disc and moving the first compact disc in both vertical and horizontal direction (Fig. 4);

(b) the transporter carriage 8 comprises a single horizontally rotatable gripping head 9 having first and second locations each for respectively gripping and directly holding the first and second compact disc simultaneously by the single gripping head (Fig. 2);

(c) the first and second compact discs are engaged by the gripping head 9 (Fig. 4);

(d) the first and second compact discs are held in fixed relative positions while the first and second compact discs are engaged by the gripping head 9 (Fig. 4); and

(e) as in claim 7, the gripping head 9 includes a motor 55 for selectively rotating the first compact disc about its axis (Fig. 4).

A typical disc labeling system such as Balsom's requires a disc conveying mechanism for transporting a selected disc from one location such as a recording means to another location such as a labeling means. For example, Hayashi uses a vertical and horizontal moveable transporter to convey and rotate a disc from one location to another location. Hence, when there is an advantage of simplifying the transportation mechanism of Balsom's labeling processes, it would have been obvious to one of ordinary skill in the art to use Hayashi's disc transporting and disc rotating means in Balsom's disc labeling processes, because Hayashi's transporter can select a disc from a plurality of disc storage means in one location and then move and flip over the selected disc to the printer similar to the claimed features.

Allowable Subject Matter

5. Claims 2, 4, 8, 10, 12, 28, 29 and 31 are allowable over prior art.

6. Claims 6, 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on the Amendment filed on November 12, 2004.

As in claims 2, 8, 12 and 34, the prior art of record fails to teach or fairly suggests the following features:

(a) a transporter carriage for gripping the first compact disc and moving the first compact disc between the recorder and printer, the transporter carriage comprises a single gripping head rotatable about a horizontal axis and having first and second gripping locations each for respectively gripping and directly holding the first and a second compact disc simultaneously by the single gripping head. such that the first and second compact discs are held in fixed relative positions coextensive along a common axis in different planes while the

first and second compact discs are engaged by the single gripping head; and

(b) the transporter carriage grips the first and second compact discs using a vacuum.

As in claims 6 and 32, the prior art of record fails to teach or fairly suggests that the compact disc processing system having the following features:

(a) a transporter carriage for gripping the first compact disc and moving the first compact disc between the recorder and printer. the transporter carriage comprises a single gripping head rotatable about a horizontal axis and having first and second gripping locations each for respectively gripping and directly holding the first and a second compact disc simultaneously by the single gripping head. such that the first and second compact discs are held in fixed relative positions coextensive along a common axis in different planes while the first and second compact discs are engaged by the single gripping head; and

(b) a supply location having a vertically extending rod sized to fit within a central opening provided in the first compact disc.

As in claim 10, the prior art of record fails to teach or fairly suggests that the compact disc processing system having the following features:

(a) the transporter carriage is movable in both vertical and a horizontal directions to pick up one of the plurality of blank compact discs held at the supply locations the transporter carriage comprises a pickup arm and a gripping head attached to one end of the pickup arm, the gripping head has first and second gripping locations each for respectively gripping the first and second compact discs simultaneously such that the first and second compact discs maintain a fixed axial position while engaged by the gripping head, and the gripping head is rotatable about a horizontal axis of the pick up arm; and

(b) a supply location having a vertically extending rod sized to fit within a central opening provided in the first compact disc.

As in claim 28, the prior art of record fails to teach or fairly suggests that a compact disc processing system having the following features:

(a) a transporter carriage moveable in both a horizontal and a vertical direction, the transporter carriage comprises a gripping head that is rotatable about a horizontal axis, the gripping head includes first and second gripping locations to respectively hold the first and a second compact disc on first and second parallel planes, wherein the first and second

compact discs maintain a fixed axial relation while engaged by the gripping head; and

(b) a vacuum pump coupled to the gripping head to selectively provide a vacuum to the first and second gripping locations.

As in claim 31, the prior art of record fails to teach or fairly suggests that a compact disc processing system having the following features:

(a) a transporter carriage moveable in both a horizontal and a vertical direction's and a gripping head coupled to the transporter carriage and rotatable about a horizontal axis, the gripping head includes first and second gripping locations to respectively hold the first and a second compact disc on first and second parallel planes the first gripping location comprises a centering feature to axially align the first compact disc with the first gripping locations wherein the first and second compact discs are held in fixed axial positions while the first and second compact discs are engaged by the gripping head; and

(b) a plurality of deflectable fingers which extend from the gripping head.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

kc 12/23/04

Kim-Kwok CHU
Examiner AU2653
December 23, 2004

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